otary Wing Mishaps
During Water Bucket Operations
1996 - 2000

Extracted from the RMIS
plus two USFS mishaps

CH-47D Class E

At a 50 ft hover fire bucket upper support ring snapped causing bucket to collapse. Crew chief released the load causing center cargo hook to swing and strike bottom of airframe, causing the cylinder cam to crack. Acft landed without further incident.

CH-47D Class E Mishap

The Ch-47 crew was conducting long-line (150 ft) water bucket fire fighting operations. The crew failed to maintain adequate terrain clearance, causing the water bucket to strike a ridge and a tree. The water bucket top support ring was broken in two places.

Contributing factors:

1. Limited visibility in smoke
2. Crew distracted by other helicopters
3. Empty bucket was trailing behind the aircraft, so the FE had difficulty judging clearance

UH-60 Class E

During fire bucket training, PI jettisoned fire bucket from 50 ft and 20 kts. Bucket sustained minor damage. No damage to aircraft.

CH-47D Class E

During water-bucket training, while performing a down slope approach in mountainous terrain, the water bucked was allowed to descend to an altitude that resulted in ground contact. The FE announced "climb,climb,climb"and the P* immediately increased thrust. The water bucket brushed the side of a ridge. A POC was performed to inspect the bucket which was not damaged. The mission was continued and completed as planned.

UH-60A Class E

While at 40 kts and 90 ft agl, performing Bambi bucket qualification training on mil reservation, the CE released the load of water. As the water released from the bucket, the cargo hook opened, releasing the entire Bambi bucket.

CH-47D Class C

During an approach at 50 knots, 173 ft AGL during Bambi Bucket qualification the center cargo hook opened allowing a filled Bambi Bucket to fall; destroying the bucket. The center cargo hook was opened half way but no lights illuminated on the master caution panel. Center hook reset itself on shutdown. Inspection revealed that damage was limited to destruction of the Bambi Bucket.

US Forest Service / Bureau of Land Management

Two fatal mishaps last season:

Bell 206 Uncommanded right roll at hover, rotor system under investigation, 1 fatality, 2 survived

Bell 412 Rogue pilot, poor supervision, conducted aerobatics with fully loaded waterbucket, dual engine

USFS reports 43 near-midair collisions over fires. 32 of these involved two helicopters.

Summary

Bucket Malfunction		1
Bucket impacts terrain		2
Crew Error		1
Hook Malfunction		2

Class	A	B	C	D	E
	0	0	1	0	5